

Two New Anthocorids and a New Microphysid from Florida (Heteroptera).

By W. S. BLATCHLEY, Indianapolis, Indiana.

Since my work on the Heteroptera of Eastern North America appeared a new species of the family Anthocoridae, belonging to a genus not before known to be represented in this country, has been taken in Florida and another undescribed species of the same family was referred to the wrong genus in that work. A new species belonging to an apparently new genus of the family Microphysidae has also been taken. These have, through the kindness of Mr. W. E. China, all been compared with specimens in the British Museum. They are therefore characterized and named in this paper. The types of all three are in my private collection.

The genus *Asthenidea* Reuter (1884) is closely allied to *Cardiastethus* Fieber (1860), differing mainly in the less deeply emarginate base of pronotum, the more shallow transverse groove of scutellum, and by the absence of a hamus in the cell of the inner wings. It is not very strange, therefore, that, without specimens for comparison, I ascribed to the former genus, on page 631 of the Heteroptera of Eastern North America, a species which I called *Asthenidea pallescens* Reuter, but which, according to China, is an unnamed species of *Cardiastethus*, allied to *C. tropicalis* Champ., a Guatemalan species. I therefore give it the new name

Cardiastethus flaveolus sp. nov.

Elongate-ovate. Color above and beneath a nearly uniform pale brownish-yellow, the head and thorax shining, the elytra duller with numerous scattered inclined rather long yellowish hairs; inner half of cuneus usually in great part fuscous; membrane pale dusky hyaline, slightly iridescent. Beak scarcely reaching front coxae, its apical joint slender, acute. Eyes relatively large, subglobose, coarsely faceted, narrowly separated beneath. Antennae slightly longer than head and thorax united, thickly pilose; joint 1 reaching tip of tylus, 2 three times as long as 1, visibly thickened apically; 3 and 4 slender, tinged with fuscous, each about two-thirds the length of 2.

Pronotum subtrapezoidal, its base less than twice as wide as apex, very broadly and deeply concave; disk with a wide median transverse impression, the callus of front lobe almost smooth, transversely convex, the hind lobe depressed, finely transversely rugose-punctate; hind angles thickened, slightly prolonged, the side margins in front of them almost straight, finely carinate. Scutellum with base broadly exposed, very finely punctate, disk with a distinct postmedian transverse impression, its apical portion more coarsely and distinctly punctate. Elytra elongate-oval, passing tip of abdomen by one-third the length of membrane; clavus strongly declivent toward corium, beset with three irregular rows of very fine punctures; sides of elytra subparallel to base of cuneus, thence broadly curved into the rounded tips of membrane. Osteolar channel long and curved. Length 2.5—2.8 mm.

Described from seven specimens taken at Royal Palm Park, Florida, in December and April by sifting vegetation in low damp places and by beating the dead fallen leaves of royal palm in the dense hammock on Paradise Key. *Type* a male taken at the Park December 18, 1924. According to China my specimens "are very close to, if not identical with, three specimens in the British Museum from San Geromino, Guatemala, which were wrongly identified by Champion as a variety of *C. tropicalis* but which are specifically distinct from the typical form of that species." Champion, after his description of *tropicalis*, mentions these specimens very briefly as follows¹:

"Var. Above and beneath testaceous, the elytra more sparsely punctured."

ELATOPHILUS Reuter, 1884, 56, 61.

This genus belongs to the subfamily Anthocorinae, as treated on page 633 of the Heteroptera, and differs from *Anthocoris* in having the head more prolonged with eyes much more distant from the front margin of pronotum, the base of pronotum feebly but distinctly punctate; hind coxae widely separated, with apex of metasternum truncate and extending between them. In *Anthocoris* the eyes are subcontiguous to apex of pronotum, and the hind coxae are narrowly separated

¹Biol. Cent. Amer. (Hemip.—Heterop.) II, p. 331.

or contiguous, the apex of metasternum narrowly rounded between them.

Elatophilus pinophilus sp. nov.

Elongate-oval, almost glabrous. Head, pronotum and scutellum reddish-brown, shining, the tylus and occiput somewhat darker; elytra pale dull yellow, the cuneus and tip of clavus and a faint cloud near apex of corium fuscous; membrane a uniform whitish hyaline; sterna and legs pale brownish-yellow, ventrals fuscous-brown. Head porrect, longer than its width across eyes; tylus stout, cylindrical, its apex truncate. Antennae stout, as long as head and pronotum united; joint 1 and basal half of 2 yellow, 1 just reaching tip of tylus; 2 with apical half fuscous, two and a half times as long as 1, visibly but feebly thickened toward apex; 3 and 4 fuscous, oblong-fusiform, finely pubescent, 3 scarcely as long as 1, 4 one-fourth longer than 3, obtusely pointed. Pronotum subtrapezoidal, twice as wide at base as apex, hind angles somewhat prolonged, subacute; sides in front of them feebly sinuate and convergent from base to apical third, thence rounded to apex; disk with a deep, entire postmedian transverse impression, front lobe smooth, convex and with a faint median impressed line, hind one flattened, minutely shagreened. Mesoscutum broadly exposed. Elytra slightly surpassing abdomen, almost invisibly punctate, very finely pubescent. Abdomen of female broadly oval, narrowed at base. Length 2.8 mm.

Type a female, taken April 14, 1927, at Royal Palm Park, Florida, by beating the tops of a dead and fallen pine. It apparently belongs to the subgenus *Euhadrocerus* Reut., characterized by having joint 3 of antennae not longer than 1, with beak scarcely surpassing front coxae. This subgenus is represented by a single heretofore known species, *Elatophilus* (*Euhadrocerus*) *crassicornis* Reuter, described from Algeria. That is piceous-black, with membrane infusate. No member of the genus *Elatophilus* has previously been taken in this country.

CHINAOLA gen. nov.

This genus differs from *Mallochiola*² Bergroth, as char-

²I was unable to borrow in time a specimen of *Mallochiola gagates* from its authors. The differential characters between the two genera are therefore deduced from their description and figures of *Mallochiola* (*Idiotropis*) *gagates* in Bull. Brooklyn Entom. Soc. XIX, 1924, p. 70 and fig. 2, pl. 1.

acterized on page 658 of the Heteroptera, the only other genus of the family Microphysidae known from North America, in having the front margin of pronotum truncate not concave; elytra narrowly oval with sides subparallel from just behind humeri to base of cuneus, not broadly oval with sides rounded as in *Mallochiola*, and membrane with two veins projected backward from a ridge near base to the middle of disk, the outer one bent angularly at basal third. The genus is named in honor of W. E. China, the efficient Hemipterist of the British Museum, who has given me much aid in my studies of eastern American Heteroptera.

Genotype: *Chinaola quercicola* sp. nov.

***Chinaola quercicola* sp. nov.**

Oblong-oval. Head black, strongly shining, glabrous; pronotum and scutellum black, less shining; clavus and basal two-thirds of corium white; apical third of corium fuscous, cuneus and broad median bar of embolium black; base and apex of embolium white; membrane dusky translucent, strongly iridescent; legs and beak dark reddish-brown. Head porrect; clypeus stout, its apex obtuse; ocelli small, separated by four times their diameters; beak stout, apparently 3-jointed, reaching front coxae, its apical joint acute, decurved. Antennae black, about as long as head and thorax, bristly pubescent; joint 1 not reaching tip of tylus; 3 and 4 subequal, 3 two-thirds the length of 2. Pronotum with apex and base truncate; collar distinct, prominent; disk very finely transversely rugose, rather thickly pubescent with very fine suberect blackish hairs; scutellum feebly convex, glabrous, finely transversely rugose. Elytra conjointly narrowly oval, surpassing abdomen by three-fourths the length of membrane; sides straight and parallel to base of cuneus, thence gradually curved into the strongly rounded tips; disk very finely pubescent. Hind tibiae curved, one-half longer than femora; tarsi 2-jointed, joint 2 more than twice the length of 1. Length 1.5 mm.

Type a female, taken March 10, 1927, at Dunedin, Florida, by beating the foliage of water oak. The much narrower form of body, different relative length of antennal joints, different shape of pronotum, etc., distinguish this unique form from *Mallochiola gages* M. & M.